

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) An information exchange method of exchanging information between a communication terminal having a short distance wireless communication device and a host having another short distance wireless communication device and an information acquisition device, the method comprising:

acquiring identification information identifying the communication terminal by the information acquisition device;

~~establishing a short distance wireless communication path between the communication terminal and the host in reference to the identification information; and~~

controlling the short distance wireless communication device of the host to,

transmit a page message that contains the identification information
and causes the communication terminal to operate in a hopping pattern

determined by the host being a master device, and

transmit a request, following the page message, for establishing a short distance wireless communication link;

generating a connection between the host and the communication terminal over the short distance wireless communication link established in response to the request; and

~~initiating an information exchange between the communication terminal and the host based on a communication between the short distance wireless communication devices using the established short distance wireless communication path connection.~~

2. (Original) The method according to claim 1, wherein

said acquiring includes reading a bar code on said communication terminal, the bar code indicating said identification information.

3. (Original) The method according to claim 2, wherein

said bar code is printed or attached on the communication terminal.

4. (Original) The method according to claim 2, wherein

said bar code is electrically displayed on the communication terminal.

5. (Original) The method according to claim 1, wherein

said acquiring includes receiving said identification information from said communication terminal to said host via an IrDA communication.

6. (Original) The method according to claim 1, wherein

said acquiring includes receiving said identification information transmitted from a wireless-tag disposed in said communication terminal.

7. (Original) The method according to claim 1, wherein

said acquiring includes:

detecting an image displayed on said communication terminal; and

processing the image thereby creating said identification information.

8. (Original) The method according to claim 1, wherein

said acquiring includes:

referring to a predetermined conversion table wherein said identification information acquired by said acquisition device is used, and acquiring a reference result; and
converting the reference result to a second identification information.

9. (Original) The method according to claim 1, wherein

said acquiring includes calculating a second identification information in accordance with a predetermined calculation procedure wherein said identification information acquired by said acquisition device is used.

10. (Original) The method according to claim 1, wherein
said short distance wireless communication includes a Bluetooth.

11. (Canceled)

12. (Canceled)

13. (Canceled)

14. (Original) A cash register apparatus configured to exchange information with communication terminals each of which equips a short distance wireless communication device, and provide predetermined services to users who carry the communication terminals, the apparatus comprising:

a register mechanism;

a bar code reader configured to read a bar code of a product;

a register controller configured to control the register mechanism to perform a register processing in respect to the bar code of the product;

a short distance wireless communication device;

an imaging device configured to acquire a predetermined image of one of the communication terminals; and

an information exchange device configured to:

process the acquired image and generate identification information, which identifies one of the communication terminal among others; and

control the short distance wireless communication device so as to:

establish a short distance wireless communication path with the communication terminal; and

initiate an information exchange with the communication terminal based on a communication between the short distance wireless communication devices using the established short distance wireless communication path.

15. (New) A cash register apparatus configured to exchange information with a communication terminal and provide predetermined services to users who carry the communication terminal, the apparatus comprising:

a register mechanism;

a bar code reader configured to read a bar code of a product;

a register controller configured to control the register mechanism to perform a register processing in respect to the bar code of the product;

a short distance wireless communication device;

an identification information acquisition device configured to acquire identification information identifying the communication terminal;

a communication controller configured to control the short distance wireless communication device to,

transmit a page message that contains the identification information and causes the communication terminal to operate in a hopping pattern determined by the short distance wireless communication device being a master device, and

transmit a request, following the page message, for establishing a short distance wireless communication link;

an information exchange device configured to generate a connection between the short distance wireless communication device and the communication terminal over the short distance wireless communication link established in response to the request, and to initiate an information exchange using the connection, and

said register controller utilizing the exchanged information in said register processing and configured to provide said services.

16. (New) The apparatus according to claim 15, wherein said identification information acquisition device includes another bar code reader for reading a bar code of the communication terminal.

17. (New) The apparatus according to claim 15, wherein said identification information acquisition device includes a wireless tag receiver for receiving a signal transmitted from a wireless tag of the communication terminal.

18. (New) The apparatus according to claim 15, wherein said identification information acquisition device includes an infrared data communication device for receiving a signal transmitted from the communication terminal.

19. (New) The apparatus according to claim 15, wherein said identification information acquisition device includes an imaging device for capturing an image, and processing the image to recognize said identification information identifying the communication terminal.